OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY DIBRUGARH :: ASSAM PIN: 786 004



BID DOCUMENT

FOR

NAME OF THE WORK: Supply, Installation and Commissioning of HPCC System at

Dibrugarh University.

TENDER No: DU/NIT-2019/19

CUT-OUT SLIP

NAME OF THE WORK: Supply, Installation and Commissioning of HPCC System at

Dibrugarh University.

SUBMISSION DUE DATE & TIME : 25/09/2019 up-to 11:00 A.M.

FROM: TO:

NAME: THE REGISTRAR

ADDRESS DIBRUGARH UNIVERSITY DIBRUGARH, ASSAM

(To be pasted on the outer envelope containing "Technical" & "Commercial" bids)



OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH No. DU/NIT-2019/19 Date: 10/09/2019

Tender Notice

Sealed Tenders are invited from reputed manufactures/authorized dealers/suppliers for Supply, Installation and Commissioning of High Performance Computing Cluster (HPCC) at Dibrugarh University. Detailed specification of the items, terms & conditions etc are given below. **Last date of submission of Tender as per annexure with all relevant papers is** 25/09/2019 up-to 11:00 A.M. to be submitted at Registrar's Office, Dibrugarh University, Dibrugarh, Assam.

Availability of Bid papers	From 10/09/2019 to 24/09/2019
	between 10:00 A.M. to 3:00 P.M.
Last date for receipt of Bid	25/09/2019 upto 11:00 A.M.
Time & Date of opening of Bid	25/09/2019 at 02:30 P.M.
Place of opening of Bid	Office of the Registrar, DU
Cost of Document	500/- Non refundable
EMD	2.5 % of the Tender Value

The tender should be submitted in two separate sealed envelopes *i.e.* **Part - I** TECHNICAL BID and **Part – II** FINANCIAL BID. The technical bid shall be opened on above mentioned date and time and the financial bid of only those bidders who qualify in technical bid shall be opened on the same date or at a later date which shall be intimated to the tenderer whose technical bid are found to be valid. Dibrugarh University reserves all the rights to reject any or all the tenders without assigning any reason thereof.

Sd/-Registrar Dibrugarh University

Copy to:

- 1. The Deputy Registrar (F&A), D.U. for information.
- 2. Dibrugarh University Website
- 3. Notice Board
- 4. Office File

Sd/- RegistrarDibrugarh University

PART A - TERMS AND CONDITIONS

GENERAL INFORMATION

The tender bids duly complete in all respects, along with the necessary documents should be submitted to the Registrar, Dibrugarh University. The Technical Bids so received, shall be opened on 25/09/2019 at 02:30 P.M. in the Office of the Registrar, Dibrugarh University in the presence of the representatives of the bidders. The Financial bids of the Tenderers shall be opened on the same date or at a later date to be intimated to the tenderers whose Technical Bids are found to be valid. Right to reject any or all Tenders, without assigning any reason thereof is reserved by Dibrugarh University.

Terms and Conditions of Supply:

- 1. All the manufacturers/ distributors/ stockists should also give a brief profile about their company and the facilities available with them of the quoted items. Their turnover and important firms/ Government Institutes/ P.S.U.s etc. to which they are supplying quoted items, should also be mentioned.
- 2. The last date and time for the acceptance of the bids is 25/09/2019 up-to 11:00 A.M.
- 3. Suppliers shall submit the following documents along with their quotations:
- (a) PAN/GST Registration No.
- (b) Technical specifications offered by the Supplier.
- (c) Technical compliance table
- (d) Technical literature regarding the offered products including diagrams.
- 4. The rates should be mentioned in the **Schedule** attached with the Tender Document. Each page of the tender shall be signed in full and stamped with the seal by the supplier. The supplier must clearly state in what capacity he or she is signing the Tender.
- 5. The supplier shall submit the tender in two envelopes. The first envelope (Technical Bid) shall contain all the documents referred to in **2 above** and sealed. The second envelope (Commercial Bid) shall contain the **Schedule**, in which the supplier shall register the rates of supply. The second envelope shall also, likewise, be sealed. Both the envelope then should be put together, and should be sealed in an envelope on which the cut out slip provided as part of the tender document should be pasted, and should prescribe time and date. The Technical Bid shall be opened first to ensure that suppliers have submitted all the requisite documents. If the Technical Bids are not in order or are deficient in some respect, the commercial bids in respect of such tenders shall not be opened. The date and time of opening the financial bids shall be announced one day after opening all the Technical bids.
- 6. Supplier should read carefully all the instructions and terms and conditions, etc before registering rates in prescribed schedule of the tender. Taxes and duties etc. should be shown separately.

- 7. The Technical Documents shall be opened, at 02:30 P.M. on 25/09/2019 or on the next working day if the offices of the University remain closed due to any reason
- 8. Technical specifications of the instruments/equipments are given in **Annexure** to these papers (Part B).
- 9. The delivery and installation should be completed within 45 (forty-five) days or as specified from placing of the order. No extension shall be granted to the contractors/suppliers for the period of delivery, under any circumstances.
- 10. If the supplier fails to deliver the article as per the delivery schedule, the University shall be free to procure the balance/undelivered supply, at the risk and cost of the supplier, from other such suppliers.
- 11. The goods, articles, materials supplied by the supplier shall be accepted after inspection by an officer authorized by the competent authority. No articles/materials which do not conform to the specifications laid down in the terms and conditions or damaged in transit shall be accepted.
- 12. The bills of the suppliers shall be paid by the University after all the materials/articles/equipments have been received and installed, inspected.
- 13. Vendor must submit Compliance statement in tabular form comparing each specification of the quoted item with that given in the Tender Document **Part B**.
- 14. The bidder has to install all the required applications provided by the user and also has to provide at least 1 (one) day training to the user including their group.
- 15. This tender document is not transferable.
- 16. In the event of any breach of the terms and conditions of the supply, the University may terminate the contract placed with the supplier and forfeit the security deposit of the supplier.
- 17. The Bidder shall have to be an Original Equipment Manufacturer (OEM) or his Authorized Dealer/Channel Partner having a Direct Purchase and Support agreement with the OEM. In case, the Bidder is a Dealer, a valid LETTER OF AUTHORIZATION from Original Equipment Manufacturer should be produced along with the bid.
- 18. The bidder should have average annual sales turnover of Rs. 1(one) Crore or more during the last three financial years ending 31st March, 2019. Attach firm's last 3 years audited profit and loss Account balance sheet duly audited by C.A.
- 19. The bidder must be ISO certified and shall have to be in the IT Business in the last three years.
- 20. The quantity as mentioned at Part-B (Specifications) may be increased or decreased at the time of placing Order as per requirement.
- 21. Tenderers are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender Document or submission of a bid not substantially responsive to the Tender document in every respect will be at the tenderer's risk and may result in the rejection of the bid.

- 22. The bidder should be registered under the Companies Act 1956 or a registered firm. Registration certificate to this effect must be produced.
- 23. The bidder should have executed minimum 3 (three) such projects related to HPCC in different Central/State Government Institutes/Universities/Autonomous Bodies/PSUs etc. not less than 50 % of the estimated cost of the specified equipment. Documentary evidence shall have to be produced along with the bid documents.
- 24. The bidder should ensure that: Defective part replacement during warranty period (3 years) within a period of seven working days with Advance Replacement Policy.
- 25. Bidder should be in a position to provide case logging procedure for both hardware and software failure.
- 26. Please specify the heat dissipation (in BTU) and max power consumption of each component when configured with the above configuration.

27. Note:

- (a) Tenderers are advised to read carefully the Terms and Conditions of supply before recording the rates in this Schedule.
- (b) No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
- (c) The University reserves the right to:
 - (i) Accept/reject any/all tenders without assigning any reason thereof.
 - (ii) Revise the quantities at the time of placing the order without change in the rate quoted by the bidder.
 - (iii) Add/modify/relax or waive any of the conditions stipulated in the tender document whenever deemed necessary.
 - (iv) Award the contract to one or more tenderers for the items covered by the tender.

ITEM No	DESCRIPTION OF GOODS WITH DETAILS OF SPECIFICATIONS	Unit Price	Taxes	Qty.	Total Amount
1					
2					
3					

<u>Part - B</u> Specifications

Supply, Installation and Commissioning of HPCC System at Dibrugarh University:

1. Master/Login/Co	mpilation Node (Qty: 1 Nos.)
Technical Specificati	ons
Processor	X86 Architecture
Processor Type	2 x Intel® Xeon Cascade Lake Silver Processors 16-Core, 2.1GHz, 22M or better
Chipset	Intel C621 Chipset
Memory	128GB ECC Registered DDR4 2400MHz RAM
Memory Slots	16 DIMMS or More
No of HDD Bays	Eight or more
SSD	2 x 480GB Enterprise Class Hot Swap 2.5" SSDs
HDD(s)	6 x 10TB SAS 7.2KRPM Enterprise hot-plug 3.5" HDDs
RAID Controller	SAS (12GBps) 2GB Cache HW Raid Controller with Battery Backed Cache protection
RAID Support	RAID 0, 1, 5, 6, 10, 50 & 60
Optical Drive	Slim DVD RW
NIC	2 x RJ45 Gigabit Ethernet LAN ports with 2 x 2M Gigabit Ethernet Patch Cable
No of High-Speed Interconnect port	One or More
Type of High-Speed Interconnect port	EDR (100GBps) Infiniband
Graphics	On board Graphics.
Exp Slot(s)	Min 4PCI-E 3.0 x 16, 2PCI-E 3.0 x 8 Slots
Remote Management	IPMI 2.0 with virtual media over LAN and KVM over LAN support. With required License for activation
I/O Ports	Minimum 2 USB 3.0 & 4 USB 2.0, 1 x VGA
Chassis Type	1U / 2U rack-mountable with sliding rails
P. Supply Type	Redundant, hot-plug power supplies
Power Wattage	Not more than 1000W
OS	Latest CentOS / Ubuntu
Peripherals	None
Warranty	3 Years Onsite Comprehensive Warranty including Advance parts replacements

Part Replacement	The bidder should ensure that: Defective parts replacement during	
	warranty period (3 years) within a period of seven working days	
	with Advance Replacement Policy	

2. Compute/Slave/	Worker Node (Qty: 8 Nos.)
Technical Specifica	tions
Processor	X86 Architecture
Processor Type	2 x Intel® Xeon Cascade Lake Gold Processors 16-Core, 2.3GHz, 22M or better
Chipset	Intel C621 Chipset
Memory	256GB ECC Registered DDR4 2667MHz RAM
Memory Slots	16 DIMMs or more
No of HDD Bays	Three or more
SSD	2 x 480GB Enterprise Class Hot Swap 2.5" SSDs
NIC	2 x RJ45 Gigabit Ethernet LAN ports with 2 x 2M Gigabit Ethernet Patch Cable
No of High Speed Interconnect port	One or more
Type of High Speed Interconnect port	EDR (100Gbps) Infiniband
Graphics	On board Graphics
Exp Slot(s)	Minimum 1 PCI-E 3.0 x 16 should be free
Remote	IPMI 2.0 with virtual media over LAN and KVM over LAN
Management	support With required License for activation.
I/O Ports	Minimum 2 USB 3.0 & 1 x VGA
Chassis Type	½ U/ 1U/ 2U rack-mountable with sliding rails
P. Supply Type	Redundant, hot-plug power supplies
OS	Latest CentOS / Ubuntu
Peripherals	None
Warranty	3 Years Onsite Comprehensive Warranty including Advance parts replacements
Part Replacement	The bidder should ensure that: Defective parts replacement during warranty period (3 years) within a period of seven working days

3. Primary Communication Network (Qty: 1 Nos.)

Switch-IB 2 Based EDR InfiniBand 1U Switch 36 QSFP28 Ports 2 Power Supplies (AC) Unmanaged Standard Depth P2C Airflow Rail Kit RoHS6 with 3 Years Onsite Comprehensive Warranty

4. Secondary Communication Network (Qty: 1 Nos.)

24 – Port gigabit Ethernet Unmanaged Switch (10/100/1000) with 3 Years Onsite Comprehensive Warranty

5. RACK (Qty: 1 Nos.)

42U Server Rack with 32AMP 2 nos PDU (IEC 13-14) with Standard Accessories. The PDU should be compatible with Master Node, Compute Node and other accessories with 3 Years Onsite Comprehensive Warranty

6. KVM Switch & Console (Qty: 1 Nos.)

17" TFT with built in Keyboard & touchpad, in a 1U single rail slide, 1 x 16port Multi-port KVM Switch with required cables 3. Years Onsite Comprehensive Warranty

7. Online UPS (Qty: 1 Nos.)

10 KVA Online UPS with one hour Backup, 16 Nos. of 12V 65ah Batteries & Stand and links with 2 Years Warranty

8. Software (Qty: 1 Set.)

Intel Parallel Studio XE Cluster Edition for Linux* user named license-Academic for 3 years

9. Software Stack & Installation

OS: Open Source Linux

Job Schedulers

GUI based Job monitoring and management Cluster Software.

The software should have an ability to switch to a different job scheduler at run time.

Vendor has to provide support for Clustering software during the warranty period GUI based reporting

Workload cum resource manager with policy-aware, resource-aware and topology- aware Scheduling

Advance reservation support

Support of job submission through CLI, Web-services and APIs

Heterogeneous cluster support	
Multi-cluster support	
Pre-emptive and backfill scheduling support	
Application integration support	
Live reconfiguration capability SLA/Equivalent	
GPU Aware scheduling	
Intuitive web interface to submit and monitor jobs	
MPI: Open MPI & MVAPICH	
Libraries: Open Source Libraries for C, C++ & FORTRAN, MPI, Scalapack etc.	MKL, Blas 1,2,3, Lapack,
3 Years Onsite Comprehensive Warranty	
Licenses of Cluster Management should be in the name of custom	ner
The bidder has to install all required applications provided by the days training to the user including his group	user & also has to provide at least
Bidder should be in a position to provide case logging p software failure.	procedure for both hardware an
Signature:	Date
Name :	2
Address :	
Addiess	
Mobile No	